PCT

RAW SEQUENCE LISTING   DATE: 05/16/2003
PATENT APPLICATION: **US/10/048,071**   TIME: 09:31:24

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        Output Set: **N:\CRF4\05162003\J048071.raw**

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  3 <110> APPLICANT: O'Donnell, Michael E.
  4         Bruck, Irina
  5         Zhang, Dan
  6         Whipple, Richard
  8 <120> TITLE OF INVENTION: DNA REPLICATION PROTEINS OF GRAM POSITIVE BACTERIA AND
  9         THEIR USE TO SCREEN FOR CHEMICAL INHIBITORS
 11 <130> FILE REFERENCE: 22221/1023
 13 <140> CURRENT APPLICATION NUMBER: 10/048,071
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C--> 14 **<141> CURRENT FILING DATE: 2002-10-23**
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 17 <151> PRIOR FILING DATE: 1999-07-29
 19 <160> NUMBER OF SEQ ID NOS: 84
 21 <170> SOFTWARE: PatentIn Ver. 2.1
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87 <212> TYPE: PRT
88 <213> ORGANISM: Staphylococcus aureus
90 <400> SEQUENCE: 2

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97 Asp Ala Leu Ala Ile Thr Asp Thr Asn Val Leu Tyr Gly Phe Pro Lys
98             35                  40                  45
100 Phe Tyr Asp Ala Cys Ile Ala Asn Asn Ile Lys Pro Ile Phe Gly Met
101         50                  55                  60
103 Thr Ile Tyr Val Thr Asn Gly Leu Asn Thr Val Glu Thr Val Val Leu
104  65                  70                  75                  80
106 Ala Lys Asn Asn Asp Gly Leu Lys Asp Leu Tyr Gln Leu Ser Ser Glu
107             85                  90                  95
109 Ile Lys Met Asn Ala Leu Glu His Val Ser Phe Glu Leu Leu Lys Arg
110             100                 105                 110
112 Phe Ser Asn Asn Met Ile Ile Ile Phe Lys Lys Val Gly Asp Gln His
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119 145              150              155              160
121 Val Cys Tyr Gln Thr Arg Gln Asp Ala Asp Thr Ile Ser Ala Leu Ala
122              165              170              175
124 Ala Ile Arg Asp Asn Thr Lys Leu Asp Leu Ile His Asp Gln Glu Asp
125              180              185              190
127 Phe Gly Ala His Phe Leu Thr Glu Lys Glu Ile Asn Gln Leu Asp Ile
128          195              200              205
130 Asn Gln Glu Tyr Leu Thr Gln Val Asp Val Ile Ala Gln Lys Cys Asp
131      210              215              220
133 Ala Glu Leu Lys Tyr His Gln Ser Leu Leu Pro Gln Tyr Glu Thr Pro
134 225              230              235              240
136 Asn Asp Glu Ser Ala Lys Lys Tyr Leu Trp Arg Val Leu Val Thr Gln
137              245              250              255
139 Leu Lys Lys Leu Glu Leu Asn Tyr Asp Val Tyr Leu Glu Arg Leu Lys .
140          260              265              270
142 Tyr Glu Tyr Lys Val Ile Thr Asn Met Gly Phe Glu Asp Tyr Phe Leu
143      275              280              285
145 Ile Val Ser Asp Leu Ile His Tyr Ala Lys Thr Asn Asp Val Met Val
146      290              295              300
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151 Gly Ile Thr Thr Ile Asp Pro Ile Lys Phe Asn Leu Leu Phe Glu Arg
152              325              330              335
154 Phe Leu Asn Pro Glu Arg Val Thr Met Pro Asp Ile Asp Ile Asp Phe
155          340              345              350
157 Glu Asp Thr Arg Arg Glu Arg Val Ile Gln Tyr Val Gln Glu Lys Tyr
158      355              360              365
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161      370              375              380
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164 385              390              395              400
166 Thr Leu Asn Glu Ile Ser Ser Leu Ile Pro His Lys Leu Gly Ile Thr
167              405              410              415
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170          420              425              430
172 Asn His Arg His Glu Arg Trp Phe Ser Ile Cys Lys Lys Leu Glu Gly
173      435              440              445
175 Leu Pro Arg His Thr Ser Thr His Ala Ala Gly Ile Ile Ile Asn Asp
176      450              455              460
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181 Leu Thr Gln Trp Thr Met Thr Glu Ala Glu Arg Ile Gly Leu Leu Lys
182          485              490              495
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194 545             550             555             560
196 Lys Leu Lys Pro Glu His Phe Glu Asp Ile Val Ala Val Thr Ser Leu
197          ·565             570             575
199 Tyr Arg Pro Gly Pro Met Glu Glu Ile Pro Thr Tyr Ile Thr Arg Arg
200         580             585             590
202 His Asp Pro Ser Lys Val Gln Tyr Leu His Pro His Leu Glu Pro Ile
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205 Leu Lys Asn Thr Tyr Gly Val Ile Ile Tyr Gln Glu Gln Ile Met Gln
206         610             615             620
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212             645             650             655
214 Gln His Phe Ile Glu Gly Ala Lys Gln Asn Gly Tyr His Glu Asp Ile
215             660             665             670
217 Ser Lys Gln Ile Phe Asp Leu Ile Leu Lys Phe Ala Asp Tyr Gly Phe
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223 Phe Leu Lys Val His Tyr Pro Asn Tyr Phe Tyr Ala Asn Ile Leu Ser
224 705             710             715             720
226 Asn Val Ile Gly Ser Glu Lys Lys Thr Ala Gln Met Ile Glu Glu Ala
227             725             730             735
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232 Trp Phe Tyr Lys Pro Ser Gln Glu Gly Ile Tyr Leu Ser Ile Gly Thr
233         755             760             765
235 Ile Lys Gly Val Gly Tyr Gln Ser Val Lys Val Ile Val Asp Glu Arg
236         770             775             780
238 Tyr Gln Asn Gly Lys Phe Lys Asp·Phe Phe Asp Phe Ala Arg Arg Ile
239 785             790             795             800
241 Pro Lys Arg Val Lys Thr Arg Lys Leu Leu Glu Ala Leu Ile Leu Val
242             805             810             815
244 Gly Ala Phe Asp Ala Phe Gly Lys Thr Arg Ser Thr Leu Leu Gln Ala
245             820             825             830
247 Ile Asp Gln Val Leu Asp Gly Asp Leu Asn Ile Glu Gln Asp Gly Phe
248         835             840             845
250 Leu Phe Asp Ile Leu Thr Pro Lys Gln Met Tyr Glu Asp Lys Glu Glu
251         850             855             860
253 Leu Pro Asp Ala Leu Ile Ser Gln Tyr Glu Lys Glu Tyr Leu Gly Phe
254 865             870             875             880
256 Tyr Val Ser Gln His Pro Val Asp Lys Lys Phe Val Ala Lys Gln Tyr
257             885             890             895
259 Leu Thr Ile Phe Lys Leu Ser Asn Ala Gln Asn Tyr Lys Pro Ile Leu
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266        930              935                940
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269 945                950                955                960
271 Asp Leu Phe Ile Val Ser Gly Lys Phe Asp His Arg Lys Gln Gln Arg
272            965              970                975
274 Gln Leu Ile Ile Asn Glu Ile Gln Thr Leu Ala Thr Phe Glu Glu Gln
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277 Lys Leu Ala Phe Ala Lys Gln Ile Ile Ile Arg Asn Lys Ser Gln Ile
278            995             1000               1005
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281    1010            1015               1020
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284 1025            1030               1035               1040
286 Gly Tyr Ile Asn Gln Lys Asp Ser Met Phe Asn Asn Phe Ile Gln Ser
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294 <211> LENGTH: 1698
295 <212> TYPE: DNA
296 <213> ORGANISM: Staphylococcus aureus
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VERIFICATION SUMMARY
DATE: 05/16/2003
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L:14 M:271 C: Current Filing Date differs, Replaced Current Filing Date